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Attorney Docket No. CR9-98-062

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	Linda Dupont	V 100 100 100 100 100 100 100 100 100 10			
	IN THE UNITED STA	ATES PATENT AND TRADEMARK OFFICE			
	In re application of: Knowles, N.	Date: Jan. 20, 2004			
	Serial No.: 09/105,528				
	Filed: June 26, 1998	Group No.: 2171			
4	For: Technique for Navigating Components of a Model Having Complex Relationships				
•		Examiner: Uyen T. Le			
	40 To Commissioner of Patents and Trademarks Alexandria, VA 22313-1450				
	TRANS (PATEN	SMITTAL OF APPEAL BRIEF NT APPLICATION-37 CFR 192)			
	Transmitted herewith in triplicate is the APPI filed on Oct. 20, 2003.	EAL BRIEF in this application with respect to the Notice of Application	peal		
	2. STATUS OF APPLICATION				
•	This application is on behalf of				
	_X other than a small entity				
	small entity verified statement: att	ached already filed			
	3. FEE FOR FILING APPEAL BRIEF				
	Pursuant to 37 CFR 1.17(f) the fee for	or filing the Appeal Brief is:			
	Small entity	\$160.00			
	LL11 00000004 090461 09105528	\$330.00 Appeal Brief fee due\$330.00			
01 FC:1402 02 FC:1251	330.00 DA 110.00 DA				

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#### 4. EXTENSION OF TERM

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136 apply.

Application petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total (a) number of months checked below:

Extension (months)	Fee for other than a small entity
X one month	\$ 110.00
two months	\$ 420.00
three months	\$ 950.00
four months	\$1480.00

(b) Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

## 5. TOTAL FEE DUE

The total fee due is:

Appeal brief fee 330.00 Extension fee (if any) 110.00			
Extension ree (if any)i 10.00	TOTAL FEE DUE	\$440.00	

#### 6. FEE PAYMENT

Attached is a check in the sum of \$
Charge Account No. 09-0461 the sum of \$440.00 (a duplicate of this transmittal is attached)

#### 7. FEE DEFICIENCY

- If any additional extension and/or fee is required, this is a request therefor and to charge Account No. 09-0461.
- If any additional fee for claims is required, charge Account No. 09-0461 \_X\_\_

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : January 20, 2004

N. Knowles : IBM Corporation

Ser. No. 09/105,528 : Dept.T81/Bldg. 503

Filed 06/26/98 : P.O. Box 12195

For: Technique for Navigating Components : Res. Tri. Park, NC 27709

of a Model Having Complex Relationships : Art Unit: 2171

Examiner: Uyen T. Le

## APPEAL BRIEF

Commissioner for Patents Alexandria, VA 22313-1450

Sir:

The following remarks in the Appeal for the above identified Application are respectfully submitted:

## **REAL PARTY IN INTEREST**

This Application has been assigned to the International Business Machines Corporation.

## RELATED APPEALS AND INTERFERENCES

Applicants know of no other Appeals or Interferences which will directly affect or be directly affected by or having a bearing on the Boards decision in the pending

Appeal.

#### STATUS OF CLAIMS

The Application was originally filed with Claims 1 - 20. Claims 1, 3, 8, 10, 15 and 17 were amended and Claims 2, 9 and 16 canceled in the Amendment dated July 24, 2000. Claims 1, 8 and 15 were again amended in the Amendment dated March 26, 2001. No further amendment to the claims was made. Accordingly, Claims 1, 3 - 8, 10 - 15, and 17 - 20 remain pending, and these are the claims which are the subject of this Appeal. A copy of the appealed claims, Claims 1, 3 - 8, 10 - 15, and 17 - 20, are contained in the attached Appendix.

## STATUS OF AMENDMENTS

Applicants last filed a Response on April 4, 2003, which was entered (but contained no amendments). No further amendments were made to the Application.

## **SUMMARY OF THE INVENTION**

The present invention discloses a technique for displaying and editing components of data which may have complex many-to-many (i.e., non-hierarchical) relationships, using a program such as a browser. The components are the elements of an object model, wherein the elements represent the object model. The components are presented in such a way as to make the **relationships** explicitly visible, allowing a user to navigate the **relationships** in an efficient, intuitive manner that clearly aligns with the structure of the underlying object model. In a preferred embodiment, when the user **selects** one of the explicit relationships, he is presented with a list of actions tailored to that relationship. In a further enhancement, the user may define one or more filters that will be applied to the actions list before it is presented.



## STATEMENT OF ISSUES PRESENTED

Applicants present for review the final rejection of Claims 1, 3 - 8, 10 - 15, and 17 - 20 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,726,688 to Seifert et al (Seifert).

## **GROUPING OF THE CLAIMS**

Independent Claims 1, 8 and 15 stand or fall together.

Dependent Claims 3, 10 and 17 stand or fall with Claims 1, 8 and 15.

Dependent Claims 4, 11 and 18 stand or fall together.

Dependent Claims 5, 12 and 19 stand or fall with Claims 1, 8 and 15.

Dependent Claims 6, 13 and 20 stand or fall together.

Dependent Claims 7 and 14 stand or fall with Claims 1 and 8.

## **ARGUMENT**

Applicant traverses the rejections below.

A. Differences Between the Claimed Invention and the Cited Art

Siefert discloses an interface for computers which changes for individual users based on past transactions and predicted future responses of the user. Siefert uses a CAD (Computer Aided Design) program to show his invention. A CAD program allows a user to generate drawings. Siefert does not disclose the use of an object

model. Siefert does not disclose a technique for displaying or working with relationships within an object model. As will be discussed below, Siefert simply does not address subject matter anything like that found in the present claims.

#### 1. Independent Claims 1, 8 and 15

Independent Claims 1, 8 and 15 stand or fall together. For exemplary purposes. Claim 1 will now be discessed relative to the cited art. Claim 1 was rejected under 35 USC Section 102(e) as being anticipated by Seifert.

The preamble of independent Claim 1 recites "computer readable code for implementing a convenient and intuitive visually-oriented technique for navigating an object model". Relative to this subject matter, the Office Action cites " the drop-down menu in Figures 1-2". It is unclear what in Figures 1 or 2 is believed to disclose an object model. There is no discussion in Siefert that the drop-down menu shows an object model. Drop-down menus are well known user interface items used in graphical user interfaces for making selection of items easier. However, the use of such menus does not teach, suggest or disclose an object model or a technique for navigating an object model.

Claim 1 further recites "a subprocess for retrieving and displaying a set of elements in said browser, said elements representing said object model". Relative to this subject matter, the Office Action cites the Siefert system displaying "the icons of FILE, DRAW, EDIT, COPY." In column 1, lines 40-42 of Siefert, these items are described as options. When one of the options is selected (such as DRAW, the "CAD program responds by providing a menu 3 of drawing options in FIG. 2" (Col. 1 lines 42-44). The cited icons simply do not represent an object model. They are selectable options that a user may select in the process of creating or working with a drawing. Accordingly, Applicant submits that Siefert does not teach, suggest or disclose the cited

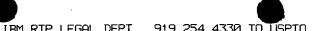


subject matter from Claim 1.

Independent Claim 1 also recites "a subprocess for retrieving and displaying relationship information from said model when said selected element is a component of said model". Relative to this subject matter, the Office Action states that this subject matter is "met when Siefert shows POINT, LINE, CIRCLE, ELLIPSE, BOX, TEXT (see Figure 2)." As noted above, these elements are displayed in a menu 3 or drawing options after a user selects a DRAW option for generating drawings using the CAD program. As discussed above, this has nothing to do with an object model, much less relationships within an object model. These represent options for creating a drawing. This not teach, suggest or disclose "retrieving and displaying relationship information..." In Seifert, no relationship information is retrieved based on selection of an element from a model, and no retrieved relationship information is then displayed. Rather, drawing options are provided in a menu to a user. Accordingly, Applicant submits that Siefert does not disclose, teach or suggest the cited subject matter from Claim 1.

Claim 1 also recites "a subprocess for enabling said user to select one or more relationships from said displayed relationship information". Relative to this subject matter, the Office Action states that this subject matter "has to be present for the user of the system of Siefert to select from POINT, LINE, CIRCLE, ELLIPSE, BOX, TEXT (see Figure 2). As noted above, Siefert in fact does not display relationship information. The options noted above are drawing options provided in a menu 3 (Col. 1, lines 42-44). There is no description or discussion of a user selecting a relationship. There is no description or discussion of a user selecting a relationship from "displayed relationship information." Nothing is based on the selection of an element from an object model, as per the present claimed invention. Accordingly, Applicants submit that Siefert does not teach, suggest or disclose this subject matter.

In summary, the present invention is directed to the understanding of



relationships, and its claims recite the concept that relationship information is displayed and that relationships are selectable by a user. This concept is not taught, suggested or disclosed in the cited art. As discussed on page 11 of the Application, "relationships are explicitly represented as elements of the model, as are the objects (components) in that model...object models which are not strictly hierarchical in structure can be conveniently and intuitively navigated, edited, and populated using the present invention...relational databases typically have many complex relationships, which are not necessarily hierarchical in structure." Further, "by explicitly displaying the complex relationships of the relational model, the present invention enables a user to better comprehend the underlaying model..." (page 12).

Accordingly, Applicants submit that independent Claim 1 patentably distinguishes over the cited art. Independent Claims 8 and 15 were rejected for the same reasons as Claim 1. Accordingly, it follows that these claims also patentably distinguish over the cited art, and it follows that the dependent claims also patentably distinguish over the cited art. Differences between some of the dependent claims and the cited art will be discussed below.

Accordingly, Applicant submits that Claims 1, 8 and 15 distinguish over the cited art, and respectfully request that the Board overturn these rejections.

# 2. Dependent Claims 4, 11 and 18

Dependent Claim 4 recites that "said action list comprises a list of actions tailored to said selected one or more relationships." Relative to this subject matter, the final Office Action states that "clearly the action list includes actions tailored to the selected relationship since the action of CENTER & RADIUS is tailored to CIRCLE." No further discussion is provided.

First, it has never been established that "CIRCLE" is a "relationship" in any context, much less the context of Claim 4, or that "CIRCLE" is a selected relationship. Further, while certainly in a CAD program "CENTER" and "RADIUS" options are clearly related to the drawing of a circle, this does not teach, suggest or disclose the subject matter of Claim 4. The selected relationships refer to user selected relationships within an object model. The cited selectable options from Siefert are not based on relationships within an object model. They are drawing options.

Accordingly, Applicant submits that dependent Claim 4 further distinguishes over Siefert. Since dependent Claims 11 and 18 were apparently rejected for the same rational, it follows that these claims also further distinguish over Siefert. There is certainly no cited teaching of an action list used in association with a selected relationship. Accordingly, Applicant submits that Claim 4, as well as dependent Claims 11 and 18, which include similar subject matter, patentably distinguish over the cited art. Applicant respectfully request that the Board overturn the rejections of these claims.

# 3. Dependent Claims 6, 13 and 20

Dependent Claim 6 recites that "said action list is filtered before being presented to said user, using one or more predefined filters." Relative to this subject mater, the Office Action cites "the action list of CENTER & RADIUS, DIAMETER filtered to drawing a CIRCLE (see Figure 2)." There is certainly no discussion in Siefert to support the contention that the option presented in menu 6 of Figure 2 are in any way filtered. Rather, it would appear that these options are hard coded in the CAD application, and that no filtering occurs. No discussion of predefined filters or the use of such filters can be found in Siefert.

Accordingly, Applicants submit that there is not support for the assertion that Siefert teaches, suggests or discloses the cited subject matter, and that Claim 6 there further distinguishes over Siefert. Since dependent Claims 13 and 20 were apparently

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rejected for the same rational as Claim 6, it follows that these claims also further distinguish over Siefert. Applicant respectfully request that the Board overturn the rejections of these claims.

## SUMMARY

Applicant respectfully submits that the final rejection of the claims under 35 U.S.C. Section 102(e) is improper and erroneous. Applicant respectfully urges the Board of Patent Appeals to reverse all grounds of the final rejection relative to the claims.

Respectfully submitted,

Gregory M. Doudnikoff Attorney for Applicant

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